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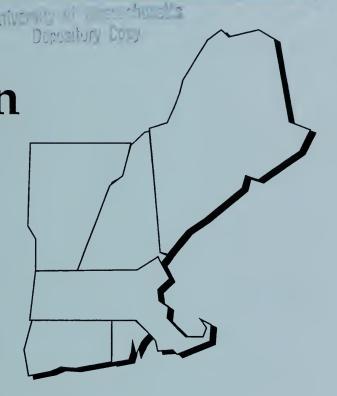
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New England Transportation Initiative

FINAL

Transportation Alternative Scenarios – Analysis

Executive Summary and Comments



Consultant Team



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Howard/Stein-Hudson Associates, Inc.
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Executive Summary

Introduction

This is the Final Executive Summary of the NETI Transportation Alternative Scenarios Analysis Report. It has been revised based on comments received from the NETI Advisory Committees (see comments section). The main body of the report published in October 1994 will remain in draft form.

The purpose of this report is to evaluate how the three Alternative Scenarios developed in the previous NETI task might affect mobility, environmental quality, and economic vitality in New England. Given the broad range and the resources available to the NETI study – encompassing all major transportation modes and six states – this analysis is of necessity based on macro-level quantitative indicators and qualitative assessments. This is the fourth draft technical report of the NETI Project following the Inventory, Forecasting, and Alternative Scenario Reports. Based on this analysis, a Transportation Plan of Cooperation will be developed for the six New England states. The findings of this report do not constitute a commitment by the states to any specific actions.

The study focuses on a 25-year time horizon to the year 2020. In some cases, an interim time frame (such as the year 2000) is used as a milestone point in the analysis where it represents the outer horizon of existing published analyses. The focus of the analysis is on the impact of the proposed actions on three measures of quality of life: mobility, environmental quality and economic vitality. The Executive Summary organizes the major findings of the report in terms of these three major goals of the NETI process. The conclusions presented represent the judgement of the Consultant Team as to the effectiveness of each scenario in achieving these goals. These findings are presented in a cross-cutting, intermodal manner. They were included in this report to help frame the discussion in the public participation process, but have not been endorsed by the Policy Committee. The Plan of Cooperation to follow will represent the actions endorsed by the Policy Committee. The main body of the text organizes the findings by mode or subject, and focuses on the data analysis without attempting to draw further conclusions.

This report also includes responses to comments received during the public review of the draft report.



The Scenarios

The Alternative Scenarios are outlined in Figures ES.1 and ES.2.

Scenario 1 calls for the continuation of current policies which have been framed in the 1990s primarily by two pieces of federal legislation: the Intermodal Surface Transportation Efficiency Act (ISTEA) and the Clean Air Act Amendments of 1990 (CAA). While representing dramatic departures from previous policies in their promotion of an intermodal approach to transportation planning, they are unlikely to challenge the basic societal reliance on auto, air and truck transportation.

Scenario 2 calls for a combination of increased investments in conventional alternative transportation systems, greater intermodal and interstate coordination, and a series of incentives to alter travel behavior. It essentially proposes a toolbox of transportation actions intended to increase capacity and reduce demand including conventional passenger rail, double stack rail freight service to selected ports, intercity bus and HOV facilities, enhanced Travel Demand Management (TDM) strategies, growth management strategies, selective highway capacity expansion, and the application of new technologies for managing traffic flow on highways. Where specific projects are mentioned they are intended to be illustrative only and do not constitute an endorsement by the Policy Committee unless otherwise indicated.

Scenario 3 calls for a dramatic change in passenger transportation to a more heavily rail and public transportation-oriented society, with the cornerstone being a regional network of High Speed Ground Transportation (HSGT) services funded through a combination of public and private sources. This would be supported by a combination of government mandates and incentives to alter individual travel behavior. On the freight side, this scenario identifies the problem as being more institutional in nature than in the means of transportation. A new approach to planning for freight transportation is recommended in the formation of the New England Regional Intermodal Freight Corporation which will take the lead in coordinating an intermodal and multi-state approach to freight transportation planning.

In general, the Scenarios are inclusive of actions included in the prior scenario. Thus, the LEV Program first proposed in Scenario 1 is also included in Scenarios 2 and 3 along with other actions which may also impact air quality to various degrees. The main exceptions are where scenarios explicitly substitute one strategy for another. For example, Scenario 3 substitutes high speed rail for conventional rail, and high occupancy vehicle lanes for general purpose lanes, in certain corridors.

The cost of building and maintaining the systems included in the scenarios for the 25 year NETI analysis period is very roughly estimated at \$70 billion for Scenario 1; \$75 billion for Scenario 2; and \$100 billion for Scenario 3. This includes only those modes specifically addressed in the analysis (for example, commuter rail but not urban transit). Of these amounts, approximately \$50 billion would be devoted to highways; \$20 billion to airports; \$5 to \$35 billion to rail depending on the scenario; and less than \$1 billion to ports. With



the exception of highways, these amounts are based on the estimated cost of the program elements (and system maintenance) included in each scenario. The highway cost is based on projected funding levels under current policies and is, thus, probably understated. The major difference among the scenarios is the estimated \$30 billion cost of the HSGT system in Scenario 3, representing a net additional increase in cost compared to the other scenarios. This is only slightly offset by a reduction in highway capacity expansion projects. Cost savings which might have been expected in Scenario 3 – the reduction of airport expansion projects for example – are not realized because these costs are simply diverted from the construction of terminals and runways to the construction of new rail connections to the HSGT system.

Methodology

The key element in the analytical methodology used in this report was the estimate of Vehicle Miles Traveled (VMT) for each scenario. The predominant mode of passenger travel in New England is the private automobile; the predominant mode of freight transport is the truck. VMT represents all miles traveled by auto, truck and bus in the region. Current New England-wide daily VMT is 308 million miles. This represents 4.7 percent of total U.S. VMT.

The VMT estimates are intended to serve as indicators of the relative growth in the demand for highway travel. Since Scenario 1 is the most highway-oriented scenario, it was assumed that it would have the highest growth in VMT while Scenario 3, being the least highway-oriented, would have the lowest level of VMT growth. It is not the goal of the scenarios to reduce VMT per se, but simply to use VMT as an indicator of the demand for highway travel. Thus, since Scenarios 2 and 3 have lower VMT than Scenario 1, the travel represented by this foregone VMT must be accommodated by other means — either capacity expansion in other modes or demand reduction.

Under Scenario 1, VMT is projected to increase by annual rates of 1.4 percent from 1996 on so that by the year 2020 it will have increased 80 percent to 554 million. This forecast is based on the assumption that the VMT growth rates of 2.0 percent annually experienced in New England in the 1980s will decline in response to slower economic and population growth rates; stabilized fuel prices; and slower growth in the demographic factors which helped to drive VMT growth in the 1980s. Under Scenario 3, VMT is projected to increase by annual rates of approximately 0.5 percent consistent with the projected growth rate of the New England population. Thus, all travel growth in excess of population growth will have to be accommodated by other means. The result is a VMT estimate of 388 million in the year 2020. This is 26 percent higher than existing conditions, but 20 percent lower than Scenario 1. In Scenario 2, VMT is projected to grow at a rate halfway between the other two scenarios.

It should be noted that VMT growth is not in and of itself a bad thing. VMT grows most during periods of economic expansion when more people are driving to work, shopping,



recreation, etc. In many rural areas, VMT can continue to grow with no congestion problems. However, in congested urban areas, VMT growth can result in declining mobility and numerous secondary impacts, the most significant of which is air pollution. The growth in VMT becomes a problem when it leads to increasing roadway congestion and externalities such as air pollution, high rates of gasoline consumption, and pressure to construct new highways which may impact watershed and other sensitive areas. These potential impacts of growing VMT are examined in subsequent sections.

■ Consultant's Conclusions

The following represents the conclusions of the Consultant Team and has not been endorsed by the NETI Policy Committee.

Based on the data presented in this study, the Consultant Team recommends that the scenarios shown below be endorsed as the preferred strategies for achieving the respective goals of the NETI study.

Goal	Preferred Scenario
Mobility	
Passenger	2
Freight	3
Environmental Protection	
Air Quality ¹	1
Other (i.e., Energy, Land Use)	2
Economic Vitality	
Passenger	2
Freight	3
0	

It should be noted that the Scenario 2 measures that are endorsed for congestion management and energy purposes also would contribute air quality benefits.



Mobility

Mobility refers to the ease of movement of people and goods across the region. Poor mobility can be caused by congestion or lack of access.

The current policies being pursued under Scenario 1 do not offer a long-term solution to the region's mobility problems. In the area of passenger transportation, the region will experience increasingly high levels of automobile congestion on the major interstate and other parallel National Highway System (NHS) routes. The percentage of congested NHS route miles will almost double from the current 12 percent to 23 percent. While congestion will continue to be focused in urbanized areas (77 percent of roadway miles will still be uncongested), congestion will spread considerably further from the urban core. The I-95 corridor will be congested in almost its entirety from the New York border to Brunswick, Maine. The I-93 corridor will be congested from Manchester, New Hampshire to Cape Cod. The I-91 and I-84 corridors are congested throughout much of Connecticut. The current levels of investment in highway capacity expansion, capacity expansion in other modes, and travel demand and growth management strategies is insufficient to alter this future. Municipalities have no incentives for curtailing development policies which lead to sprawl development which in turn generates more and longer single-occupant vehicle trips (SOVs) due to the dispersed pattern of land uses. Funding to maintain the existing system in good working order, under the pressure of an almost doubling of VMT, will be insufficient.

Similarly, airport congestion will continue to worsen at Logan Airport in Boston which functions as the main connecting point between New England and other U.S. and international destinations. This will be true even though the other eight second tier regional airports are only serving approximately 60 percent of the combined potential demand in their service catchment areas. The reason for this situation is the lack of an organized strategy to meet the demand for air travel.

On the freight side, New England will become ever more dependent on truck transportation from outside the region to move imports and exports. Currently, 80 percent of all freight tonnage in the region moves by truck. These trucks will be operating on ever more congested highways. Today, 95 percent of all tonnage shipped through East Coast ports passes through New York/New Jersey, Philadelphia, Baltimore, and Norfolk. All other ports, including all New England ports, are competing for the other five percent much of which is made up of petroleum imports destined for specific hinterlands or other hinterland-related products. Even hinterland market shares will be eroded by competition with NY/NJ, Halifax and others — increasing truck mileage in the region. While New England ports compete with each other and New England states such as Massachusetts and Rhode Island try individually to bring double-stack rail access to their ports, our competitors are making major investments in both waterside facilities and double-stack access. As with air travel, the lack of an organized development strategy under Scenario 1 is critical.

Scenario 3 is discussed next because it proposes dramatic policy departures in both passenger and freight transportation. Scenarios 1 and 3 in effect define the boundaries of



the discussion. Scenario 3 proposes to address the problem of passenger transportation congestion in both the highway and air service sectors by means of a New England-wide High Speed Ground Transportation (HSGT) system paralleling the major interstate routes of the region. Using very rough calculations, it is projected that this system would cost \$30 billion and optimistically reduce VMT by 12 percent, but only in the corridors served. Much of this reduction would occur on rural interstate highways which are not projected to be congested. In contrast, Scenario 3 assumes a 20 percent reduction in VMT throughout the region. While resources are diverted to the creation of this system, highway and air systems will become more congested to the detriment of the region's mobility. The resources to invest in parallel systems do not exist.

The other possible role of an HSGT system is to reduce congestion related to air service. In fact, most studies of even moderate speed rail service such as planned for the Boston to New York corridor show that the majority of trip diversions will come from air travel rather than auto travel. New England has a finite air congestion problem. Logan International Airport in Boston is the only facility which experiences sustained air and ground-side congestion today. Forecasts for 2020 are for air congestion to possibly spread to Bradley International Airport outside of Hartford. New England has vastly under-utilized air capacity at existing commercial airports and likely to be abandoned military airfields. What it lacks is an organized strategy for using that capacity in a way that makes economic sense for air carriers.

The idea of the New England region, on its own, shifting the entire locus of its passenger transportation system from auto and air to HSGT is a misdirected, expensive and difficult to implement solution to the highway and air congestion problems identified in this report. It is a solution in search of a problem. However, individual corridor-specific conventional and high speed rail projects should be considered on their merits under Scenario 2 (see below). For example, all of the New England states fully support the Northeast Corridor Transportation Plan (NCTP) for three-hour rail service between Boston and New York.

On the other hand, the Scenario 3 proposal to create a New England Regional Intermodal Freight Corporation deserves consideration. We recognize that implementing this proposal represents an institutional challenge given strong traditions of state sovereignty and autonomy in New England. The creation of an intermodal freight transportation system incorporating ports, airports, railroads and trucks is critical for maintaining the mobility of products in the region. The current state-by-state and port-by-port approach is unlikely to preserve existing markets or capture new ones; effectively target limited resources into an efficient strategic investment approach; or avoid an increasing reliance on truck traffic originating outside the region for freight transportation. It is proposed that the Corporation establish a strategic investment plan for the region; coordinate financing; promote intermodal projects; ensure efficient port operating costs; negotiate with shippers and railroads on behalf of all ports; coordinate the provision of double stack rail access to key facilities; advance the development of air freight niche airports; and promote the dredging of deeper draft channels at key facilities to handle the new 5,000-unit container ships. Under this strategy, New England could become a key terminus of land bridge traffic from Asia through West Coast ports and on to Europe; and a hub for the collection of Midwest and Northeast goods for shipment to Europe and South America. Under the Corporation strategy, facility operation will remain in state, local or private hands.



We will now return to Scenario 2 which proposes a series of middle range approaches. On the freight side, Scenario 2 proposes a similar outcome to Scenario 3 – a coordinated regional strategy. It proposes to reach this objective by means of a voluntary coordinated regional study (similar to the airport study presently underway) rather than the creation of an Intermodal Corporation. We do not believe that a regional coordination planning study, absent a new institutional framework in which to implement the results will be effective. The problem of external competition is simply too severe.

On the passenger side, however, we do believe that Scenario 2 is the best approach. While it lacks the glamour and unifying principle of Scenario 3's HSGT system, it might actually work and be implementable at reasonable cost. Scenario 2 includes a series of incremental actions targeted at specific corridors of congestion and access, none of which by themselves can solve the problem, but together can result in a more mobile region than under Scenario 1. It is far from business as usual, and is strongly multimodal in that it does not rely on a single mode (whether highways or high speed rail) to solve the problem. Some actions are targeted at specific urban areas such as commuter rail and HOV/bus programs. Others are intercity in nature such as the Northeast Corridor Transportation Plan and Boston to Portland rail service (both of which are also included in Scenario 1); and Amtrak Inland Route service which is presently the subject of a high speed rail study. Most of the highway capacity expansion and technology projects included in Scenario 1 remain in this scenario, while many of the former drop out of Scenario 3. Travel demand management (TDM) programs would be mandatory in public agencies while the incentive of public infrastructure investment would be used to generate support for such programs in the private sector. TDM programs would include ridesharing, telecommuting, and alternate work hours. Similarly, growth management planning to minimize sprawl development would be encouraged at the municipal, subregional, and employment center levels by targeting public infrastructure investment to those areas which encourage development that reduces reliance on ever longer single occupant vehicle trips. This strategy will also enable states and subregions to select targeted strategies which are most appropriate to the urban congestion or rural access problems which they face.

On the air transportation side, the New England Council has initiated the first regional airport planning study in New England to assess the potential for improved air service through enhanced regional planning. Scenario 2 proposes a full effort in this direction leading toward the development of a regional demand allocation strategy among Logan Airport and a second tier of regional airports, so that a critical mass of services at competitive fares could be created at the second tier airports through negotiations with air carriers. This would enable Logan to reduce its quantity of short- and intermediate-haul operations and concentrate on the long-haul market. This would also help to maintain essential access to Logan for those areas of New England such as northern Vermont which are beyond the geographic range of the regional system.

In addition, studies of demand for air services find that teleconferencing has a greater potential for reducing the demand than do HSGT services. The combination of better utilizing existing airport capacity and promoting teleconferencing services offers a way to solve New England's limited air service congestion problem without constructing any new infrastructure at all aside from upgrades to existing airports. This approach is recommended in comparison to the Scenario 3 commitment to a regional HSGT system.



Environmental Quality

Ozone is the principle regional air quality problem. Today, all of southern New England, southern New Hampshire and the southwest coast of Maine is in marginal to severe nonattainment of the National Ambient Air Quality standards for ozone. Consequently, it is important to evaluate the NETI strategies with respect to their potential to be successful in reducing ozone's precursor chemicals – volatile organic compounds (VOCs) and oxides of nitrogen (NO_x). To achieve the ozone standards, it is estimated that reductions in the range of 50-75 percent in both VOCs and NO_x are required. To help achieve this magnitude of reduction, the Ozone Transport Commission's Low Emitting Vehicle (LEV) Program is assumed as a part of each of the three analysis scenarios. The Ozone Transport Commission (OTC), composed of representatives of 12 Northeast states and the District of Columbia (including all of New England), voted to petition that the U.S. Environmental Protection Agency (EPA) require states to adopt a Low Emitting Vehicle (LEV) program as part of each state's State Implementation Plan (SIP) for air quality. While electric or other Zero Emitting Vehicles (ZEVs) could be part of this strategy, and could be separately emphasized in individual state programs as they are in Massachusetts, New York and California, they were not a required element of the OTC LEV petition to EPA.

In response to the OTC petition, the auto manufacturers have proposed an alternative 49 state standard that would be implemented nationally in all states except California. This new 49 state standard would be lower than the Tier I vehicle emission standards established by the Clean Air Act Amendments of 1990 now in effect but higher than the emission rates assumed in the OTC LEV petition. As of December 1994, intense negotiations were underway involving the OTC states and the automobile manufacturers. While substantial progress has been made in these negotiations, important areas of disagreement continue to exist. EPA is expected to make a final decision on the OTC petition by the end of 1994.

Implementation of the OTC LEV program in conjunction with the other omission reduction programs contained in the CAA would reduce VOC emissions in the six New England states by 77 percent in 2020 compared to projected 1999 levels. NO_x emissions would be reduced by 72 percent. The 20 percent reduction in VMT achieved by the additional demand reduction strategies contained in Scenario 3 compared to Scenario 1 will lead to only a further four percent reduction in VOCs and an additional three percent reduction in NO_x . On the other hand, failure to implement the LEV program will reduce VOCs by only 36 percent by year 2020 while NO_x will increase by one percent compared to 1999 levels.

The solution to transportation's share of the ozone problem lies primarily in vehicle technology and not in reducing the growth in vehicle miles traveled. Reducing the growth in vehicle miles of travel is not sufficient to achieve air quality objectives, and may conflict with the goal of improving overall regional mobility in non-urban or other uncongested areas. Continued improvements in vehicle technology are required for mobile sources of emissions to be reduced by the magnitude necessary to achieve air quality standards.



In the area of Energy, Scenario 1 assumes the implementation of the National Energy Policy Act's (NEPAct) Alternative Fueled Vehicle Fleet Program. Based on DOE data, this would still result in an increase in gasoline consumption of 25 percent by the year 2020. We consider this an unacceptable future for New England. Under Scenario 2, the New England states would jointly develop and implement a regional alternative fueled vehicle infrastructure program which would increase the penetration of alternative fueled vehicles among large public and commercial fleets beyond that envisioned by the NEPAct. This would result in a five percent increase in gasoline consumption which would mean that New England would not become significantly more dependent on unstable foreign petroleum supplies. Scenario 3 would result in an eight percent reduction in gasoline consumption, achieved through a widespread market penetration of alternatively fueled vehicles for personal as well as fleet use. While this is an admirable goal, we feel that the Scenario 2 target is more realistic.

In the area of Land Use Planning and Growth Management, Scenario 1 will lead to continued pressure for sprawl development which inevitably results in VMT increasing faster than population growth. As home, work, and shopping locations spread out and leapfrog into ever larger extensions of urban areas, average trip length increases and the ability to service trips by public transportation and ridesharing diminishes. This is true despite the tendency of new suburban agglomerations called Edge Cities to form outside the traditional metropolitan core. Aside from the direct transportation consequences, this trend has several environmental consequences including the pressure placed on land, water and air resources; diminished quality of life as measured by reasonable commuting times and the enjoyment of New England's natural resources; and the preservation of a distinctly New England style of social organization focused on the traditional town or city center.

Under Scenario 1, the property tax-based system of municipal finance creates incentives for this style of development with no countervailing pressure. Under Scenario 2, this pressure will be provided by targeting government infrastructure investment to areas which promote development that will be transportation positive, i.e., it will not generate a demand for longer trips, and will be feasible to serve by public transportation and ridesharing. We recommend this approach. Scenario 3 calls for greater state coordination and mandates. Given the strong tradition of local autonomy in New England, we believe this approach on the whole is not institutionally feasible.

A final consideration is the environmental impact of building new transportation systems. While rail lines are generally perceived as being environmentally benign, they are construction projects like any other. Any proposals for new rail services using conventional technology illicit strong local opposition concerned about noise, construction impacts, parking, and even Electromagnetic Fields (EMF) in the case of electrified systems such as the NCTP. While the HSGT system should parallel and be incorporated into the interstate highway system to the extent possible, massive local environmental opposition should be expected to its construction. In comparison, the airport congestion problem which it is designed to relieve can be solved within the infrastructure of existing commercial and military airfields in New England, and by the growth of teleconferencing technologies which have essentially no infrastructure. This is the core of the Scenario 2 approach.



Economic Impacts

Under Scenario 1, New England will experience increasing levels of congestion in the movement of people and goods. This will have a negative impact on New England's economic vitality. The regional and national economic forecasts used throughout the NETI project have shown New England growing at between two-thirds and three-fourths the national average during the next 25 years. We do not believe that even this rate of growth can be counted on under Scenario 1. This means that New Englanders will be growing poorer in relation to other Americans. It is important to understand that slow economic growth has environmental consequences as well. In periods of slow growth, the resources and political support to address environmental problems declines. In addition, the quality of life of many New Englanders as measured by the rewards of rising income will be less than for other Americans.

Scenario 2 offers the opportunity to at least achieve the projected levels of economic growth, albeit still less than the U.S. as a whole. This would be achieved by the range of passenger transportation initiatives included in the scenario which would reduce highway and air transportation congestion.

Scenario 3 has two completely opposite effects. The New England Regional Intermodal Freight Corporation, by providing for the more efficient movement of goods and services into and out of New England, has the potential to generate the extra increment of growth required to reach parity with national forecasts. On the other hand, the proposed HSGT system and related government mandates on travel behavior and growth management have potentially severe negative consequences. It would easily take the 25-year NETI forecast period to achieve the full potential of the HSGT system. During this period, the New England states would have to forego the type of incremental investments in multimodal capacity expansion characterized by Scenario 2. The region could not possibly afford to invest in parallel systems, one of which would become redundant. During this period, congestion would increase on the core highway and air systems and become major detriments to business growth. In addition, government mandates in the areas of TDM and growth management, while necessary adjuncts to the process of shifting travel behavior from one mode to another, would also be major disincentives to business growth. This is a high risk strategy with very uncertain benefits.



Figure ES.1 Scenarios by Policies

		Scenarios	
Policies	Current Policies	Moderate Change	Major Change
Driving Force	 Market Existing government policies 	MarketVoluntary cooperationIncentives/disincentives	 Government catalyzing private sector investment Government mandates Public/private social compact
Institutional Arrangements	• Existing cooperative efforts	 New intra-New England cooperative efforts Improved cooperation with New York, Canada, and private shippers/carriers 	 New England Intermodal Authority Regulatory standardization at all levels of government Removal of unnecessary institutional barriers
Revenue Sources	• Existing fuel taxes and user charges	 Incremental fuel tax increases Congestion pricing demonstrations 	 Major private sector investment Meaningful fuel tax increases Major congestion pricing implementation
Revenue Distribution	 Current trends including modest transit/rail increases 	Higher funding levelsGreater flexibility at state/federal levels	Major shift to HSGT and public transportation
Passenger Transportation	 Increasing dominance of auto and air systems with increasing congestion Individually-based transportation 	 More balanced intermodal system More creative and cooperative use of existing auto/air facilities More emphasis on public transportation Improved public transportation amenities and information 	 Preservation of existing system Major shift to HSGT and public transportation
Freight Transportation	• Continued dominance of trucking	 Increasing importance of rail for selected long-haul markets Targeted port strategy Enhanced intermodal connectivity Specialized treatment of containers Improved information and interlining facilitation 	Major shift to HSGT and intermodal coordination Major new New York and Canadian gateways



Figure ES.1 Scenarios by Policies (continued)

		Scenarios	
Policies	Current Policies	Moderate Change	Major Change
Growth Management Planning	 Locally based Varied levels of transportation coordination Market driven within current government policies 	 Demonstration-based approach targeted to specific new developments Growth centers Less reliance on property tax for municipal services 	Sub-regional approach consistent with state and regional transportation plans and processes
Travel Demand Management (TDM)	Voluntary TDM and state sponsored ridesharing programs	 Aggressive public agency internal programs Negotiated approach tied to new or modified development and infrastructure improvements Tax credits 	 Mandates for all but small employers Routinely incorporated in operation of existing activity centers Incentive-based insurance and tax policies Urban parking constraints
Water Resources	Wetland protection on case by case basis	 Urban runoff regulations modified by Clean Water Act reauthorization Better state/federal coordination 	Systematic approach to wetlands protection and regional banking
Air Quality	 Vehicle emissions control Voluntary TDM LEV standards 	 More aggressive voluntary employer programs and growth management plans tied to specific infrastructure improvements Emissions control on heavy-duty and offroad vehicles 	 Mandatory travel and growth management programs Increased use of public transportation services
Energy	 Petroleum-based transportation system 	 Contingency plans for petroleum supply interruptions Alternative fuels 	 Reduction in long-term dependence on petroleum-based systems
Alternative Fuels	 Current CAAA and NEPact large fleet mandates 	Greater commercial fleet participation	Widespread penetration of personal and commercial markets



Figure ES.1 Scenarios by Policies (continued)

		Scenarios	
Policies	Current Policies	Moderate Change	Major Change
Telecommuting/ Teleconferencing	• Technology-driven growth and small government demonstration projects	 Large public agency demonstration projects Greater private sector participation tied to specific infrastructure improvements 	 Mandates for all but small employers Major growth industry
IVHS	Modest IVHS implementa- tion in commercial sector	 Significant IVHS implementation where appropriate 	 Full commercial and passenger IVHS implementation where appropriate



Figure ES.2 Scenarios by Mode

		Scenarios	
Policies	Current Policies	Moderate Change	Major Change
Highways	Inadequate system preservation funding Limited capacity expansion approved on individual basis	 Improved system preservation funding Capacity expansion based on defined criteria consistent with other public policies 	 Full system preservation funding Capacity expansion primarily for intermodal connections and high occupancy vehicle facilities
Trucking	 Modest IVHS implementation and regulatory standardization Increasing dominance of freight markets 	 Full IVHS and regulatory standardization Some shift of long-haul markets to rail Improved intermodal coordination Enhanced clean/alternative fuel programs Improved technology 	 Full IVHS implementation in personal vehicle market Major investment shifts to multi- modal strategies
Intercity Bus	Continued rural abandonment or transfer to public operation Some urban growth due to HOV facilities Conversion to rail feeder services Selective expansion due to public investment	 Enhancement of rural services More extensive urban HOV facilities Greater conversion to rail feeder services in appropriate markets 	• Fully integrated intermodal system
Passenger Rail	 Northeast corridor improvements Boston to Portland completed Limited commuter rail expansion Limited tourist expansions 	 Additional new intercity and commuter services Some recreational expansion and improved schedule coordination Enhanced New England connectivity 	 Major commitment to HSGT Intermodal recreational system
Freight Rail	 Limited double-stack improvements Increase in waste and hazardous material hauling 	 More double-stack improvements Increased share of long-haul market and intermodal coordination 	 Major shift to intermodal system



Figure ES.2 Scenarios by Mode (continued)

		Scenarios	
Policies	Current Policies	Moderate Change	Major Change
Airports	 Continued delays and increasing congestion at Logan Conversion to smaller planes on some feeder services 	 Regional system with intermediate services shifted to second-tier airports Fare equity across the system 	• Intermediate services shifted to HSGT
Ports	 Individual port planning and investment Increasing external competition Minor changes in ferry services 	 Coordinated port planning and investment Meet challenge of external competition Increase in freight-related ferry services 	 Centralized port planning and investment Meet challenge of external competition Increase in ferry services



Response to Comments

The following are responses to written and verbal comments received during the Advisory Committee Review process. They correspond to the numbers on the written comments which follow. References to "see text" mean that the Executive Summary has been modified to address the comment. Corrections to the main body of the report are addressed in this section. The comments are briefly summarized, and the author and state are included in parentheses. In some cases, the Policy Committee's technical representative for the state has summarized the comments received at the State's Advisory Committee meeting but does not necessarily endorse the comment.

1. Footnotes 1 and 2 of the Financing Chart are not clear. (Loiselle/RI)

The chart in question appeared in an early draft of the report but not in the draft version actually published. It did appear in the presentation made to the Advisory Committees and is attached. With the exception of the cost of the highway programs between 2000 and 2020, all of the forecasts are based on the specific programs defined in the Scenarios. Since no specific highway program is defined for the post-2000 period, estimates of ISTEA appropriations adjusted for inflation were used.

Disagrees with conclusion regarding the targeting of infrastructure investment. (Morrison/RI)

The intent is to encourage and favor growth which can most effectively be served by transportation facilities, but not to encourage or discourage growth per se.

3. Clarification regarding inclusiveness of scenarios. (Loiselle/RI)

See text.

4. Table 2.4 should not show an increase in the number of lanes for US 6 in Rhode Island. (Loiselle/RI)

Agreed.

5. Substitute term "organized strategy" for "regional planning" in regard to New England airports. (Morrison/RI)

Agreed.



6. Why is Scenario 1 chosen for air quality? (Morrison/RI)

The available data from the Northeast States for Coordinated Air Use Management (NESCAUM) combined with the study's VMT forecasts shows that the Low Emitting Vehicle (LEV) Program as proposed by the OTC would have more significant impact on the emissions rates of ozone precursor chemicals than would the variance in VMT attributable to the different scenarios. An LEV Program of some definition is considered a Scenario 1 "Current Policy" since it was approved by the OTC vote. It is acknowledged that the exact definition of the program is still under discussion and depending on the outcome could alter the conclusions of the analysis. Many other policies recommended under Scenario 2 to control the growth of VMT in congested urban areas and corridors will also contribute to reducing ozone pollution as well as having positive impacts on gasoline consumption, watershed preservation, and other environmental values.

- 7. Same as #2.
- 8. Same as #1.
- The scenarios do not address the transportation problems of disadvantaged segments of society. (Poulsen/RI)

While we think the author raises an important point, we believe that the Scenario 2 emphasis on a wide range of transportation solutions including all modes and travel demand and growth management strategies will benefit all strata of society, particularly in comparison to the HSGT system in Scenario 3 which will primarily benefit business and upper-income travelers unless heavily subsidized.

10. More attention should be paid to the energy issue. (Poulsen/RI)

We believe that the Scenario 2 plan for a regional alternative fuel infrastructure program, in addition to the NEPAct commercial vehicle fleet program is an aggressive strategy for controlling New England's dependence on foreign petroleum supplies in the transportation sector.

11. Transportation should be fully priced to take account of its negative externalities. (Poulsen/RI)

This is a very controversial subject. Our analysis needed to take into account institutional and political reality as well as technical criteria. Scenario 2 does include steps in this direction such as congestion pricing demonstration projects.

12. Alternative transportation modes are underemphasized. (Poulsen/RI)

The resources and scope of the study required a focused approach on major travel modes and relatively proven technologies.



13. More attention should be paid to tourism, and the HSGT scenario should have been defined more flexibly. (Reynolds/RI)

We agree that tourism requires a separate initiative. All of the elements in the HSGT scenario have been proposed by someone in the course of the NETI study. While we reject the idea of a regional HSGT strategy, Scenario 2 includes the potential application of HSGT on a corridor specific basis where justified. Even if the HSGT system had been more narrowly defined, the conclusion would be the same.

14. We should analyze the appropriateness of environmental regulations and the analyses which support them. (Snyder/RI)

This is clearly beyond the scope of the study. In considering the impact of various environmental measures such as the LEV program, for example, we explicitly relied on official published analyses and documentation.

15. We should consider incentive programs for the use of alternatively fueled vehicles. (Owen/VT)

Agreed.

16. What are the implications of the 49 state LEV proposal presently being considered in negotiations among EPA, the OTC states, and the auto manufacturers? (Watts/VT)

The implications are unclear. Until these negotiations are concluded and the resulting proposal analyzed, the end state of the LEV concept will have to remain speculative and all references are to the program as voted by the OTC.

17. Congestion on Vermont's smaller roads does matter. (Watts/VT)

Agreed.

18. Land use planning is important because of the impact of sprawl development on travel patterns. (Watts/VT)

Agreed. See Scenario 2.

19. A regional transportation tourism initiative should be proposed. (Watts/VT)

Agreed.

20. Bicycle and pedestrian facilities should be included. (Anderson/VT)

We agree that this is an important issue, particularly for aspects of tourism and local travel and recreation, but is beyond the study's scope to consider from a regional transportation perspective. We will recommend a bicycle element as part of the tourism initiative in the Plan of Cooperation in that it should be easy to transport bicycles around the region on all major modes of travel.



21. The Montrealer should be returned to its traditional Springfield to Brattleboro route. (Reddington/VT)

This has not emerged as a major regional issue. The Montrealer has not lost ridership on its New London to Amherst routing, and in fact may have developed new markets. Given Amtrak's Inland Route service to Springfield (to be increased in the future), all communities previously served by the Montrealer are still served by intercity rail except Northampton (MA) which is only seven miles from the Amherst station. Of greater relevance may be the preservation of the Montrealer at all given Amtrak budget limitations.

22. VMT growth will be slower than projected as evidenced by the stagnant growth of the past three years. (Reddington/VT)

We disagree. VMT growth always slows in times of recession. VMT growth has been consistently underestimated. We do believe that growth will be slower than in the 1980s, but to go beyond our Scenario 3 estimate would not be credible to the environmental agencies.

23. VMT should not increase for energy consumption reasons. (Reddington/VT).

We agree that there are many reasons for trying to keep VMT growth under control, and each should be addressed on its merits. However, energy consumption can be addressed by both vehicle technology and VMT.

24. There should be more equity in subsidies between modes. (Reddington/VT).

Scenario 2 includes substantially more spending on rail than does Scenario 1. However, in rejecting Scenario 3, we are rejecting the notion that we can massively shift subsidies and dependence from the auto and air modes to the rail mode, or any other.

- 25. Same as #20.
- 26. There are other important auto related pollutants. (Garabedian/VT)

This comment was made more in the context of a general discussion than of a recommendation for the NETI study.

27. HOV lanes should be created from existing general purpose lanes. (Astarita/VT)

We disagree. It is important to consider the political feasibility of actions. Since this inevitably leads to a reduction in level of service for general purpose traffic, it is usually bitterly opposed and results in negative perceptions of HOV facilities.

28. The proposals should include statewide planning and government mandates over financing and certain land use controls. (Astarita/VT)

As in #27, we fail to find any popular support for this notion. To the contrary, much of the commentary on Scenario 3 has been critical of this concept.



29. Fees and taxes should be enacted to correct the historic imbalance in modal subsidies. (Astarita/VT)

See #24.

30. The investment strategies of Scenario 2 should be combined with the Scenario 3 land use strategy. (Astarita/VT)

See #28.

31. The Burlington Circumferential Highway (I-289) is losing popular support. (Astarita/VT)

The report simply notes the existence of this proposal but takes no position on it.

32. There is no market for double-stack or Roadrailer service in Vermont, and consideration should be given to the "Iron Highway" concept. (Pennington/VT)

We disagree. This connection can be provided by removing a single impediment at Bellows Falls for a cost of approximately six million dollars. Its value would be as part of a regional double-stack network with connections to Canada and the rest of the U.S. via New York state. The "Iron Highway" concept refers to new Piggyback container technology presently under development by CSX. All freight transportation technologies, particularly those which enhance intermodalism, should be evaluated and considered.

33. Change VMT wording. (Robinson/MA)

Agreed.

34. Scenario 3 seems as if it is compared to itself. (Robinson/MA)

Scenario 3 has as a measurement of the demand for highway travel a 20 percent reduction in regional VMT growth compared to Scenario 1. The HSGT strategy is projected to achieve only a 12 percent reduction at best in selected corridors. Therefore, its impact is closer to the 10 percent reduction assumed in Scenario 2.

35. Misspelling. (Robinson/MA)

Agreed.

36. The New England Council study of airports is intended to identify the potential for regional coordination; the report assumes it will develop an actual strategy. (Muench/MA)

Agreed. See text.

37. Figure 4.2 showing Hartford, New Haven and Waterbury commuter rail service is incorrect. (Hollis/CT)

Agreed. See attached.



38. VMT is an inappropriate indicator of regional mobility. (Thiebach/MA)

See text.

39. The conclusion that vehicle technology is the complete solution to the ozone problem is too strong. (Thiebach/MA)

See text.

40. VMT growth is always a bad thing resulting in not only air pollution but water pollution, energy waste, habitat destruction, health care costs, etc. (Walsh/RI)

It is impossible to create a risk free society and trade-offs are always being made between risk and the cost necessary to minimize it. The LEV program will not clean the air for "10 years" as stated by the author but for a minimum of 25 years as shown in Figure 9.1. We fully acknowledge that VMT growth in congested urban areas and corridors is a problem regardless of the solution to the air quality issue for just the reasons cited by the author, which is why we endorse Scenario 2. However, it must also be acknowledged that in many rural areas highway travel is likely to remain the only viable mobility option for most people and that many rural roadways can sustain substantial volume increases on an average annual basis with no quantifiable negative impacts.

41. Continued opposition to wetland banking. (Walsh/RI)

The author was heard but not agreed with. In the recommendations, no position is taken on this issue.

42. Explain how congestion is defined? (Walsh/RI)

A peak hour volume to capacity (v/c) ratio in excess of 0.9 on an average annual weekday basis.

43. The difference between Scenario 2 and Scenario 3 would lead one to believe that Scenario 3 was designed for failure. (Walsh/RI)

All of the HSGT elements in Scenario 3 have been proposed by someone during the course of the study. Even if the HSGT system had been more narrowly defined, the basic conclusion would still be the same — New England should assess the viability of HSGT on a corridor-specific basis and not seek to undertake a systemic change in modal emphasis.

44. Did you consider the health care costs and environmental benefits of various actions? (Walsh/RI)

We did consider the environmental impacts to the extent possible given the limited resources of the study. Consideration of health care costs has never been in the Scope of Work.



45. The focus on VMT as an indicator of congestion is not convincing. (MA NERTAC reps)

See Text. VMT is used only as a means for predicting levels of congestion under different circumstances.

46. HSGT model in Scenario 3 is not an appropriate basis for analysis. (MA NERTA reps)

See # 43.

47. The mission of the Intermodal Corporation is not clearly and consistently stated. (MA NERTAC reps)

The mission is to develop an intermodal and interstate strategic investment strategy for freight movement in New England, and to foster cooperative policy initiatives where agreeable to the states.

48. Double-stack rail should be considered between Portland and Portsmouth. (MA NERTAC reps)

This has never been suggested before and seems counter-intuitive to the general direction of freight movement in the region. It is not a priority to the two states involved.

49. Information is requested on dredging depths recommended for New England ports. (MA NERTAC reps)

See attached table.

50. A certain amount of competition should be maintained in double-stack freight movements.

Agreed, but the first priority would seem to be to establish any double-stack capability to New England ports.

51. Cost of North Station – South Station rail connector clarified. (MA NERTAC reps)

As shown in Table 8.7, the difference in cost between rail Scenarios 1 and 2 is \$4.8 billion of which \$4.0 billion is attributable to the connector. It is acknowledged that the costs beyond \$1.8 billion are for other related improvements to the MBTA commuter rail system.

52. Resolution of highway access and airport operations during adverse weather conditions could further increase Worcester's potential to function as a regional airport. (MA NERTAC reps)

Agreed.



53. Aircraft tilt-rotor technology should be considered in potential transportation solutions for the region. (Soule/MA)

This issue had never previously been raised in NETI. The future of this technology has always been somewhat problematic and remains so today.

54. The emphasis of the growth management elements of the Scenarios is on new development rather than in-fill development where transportation infrastructure already exists. (Soule/MA)

This is not intended. Government should encourage development to occur which lends itself to being effectively served by transportation infrastructure investment – wherever that should be.

55. There are many social and demographic factors which must be considered in TDM planning. (Soule/MA)

We have tried to reflect this in the text and discuss the implications of these changes. It is beyond the scope of the study to specifically address such non-transportation issues as housing policy.

56. Assistance is offered in using CTPS MetroPlan 2000 model data. (Soule/MA)

The NETI project has not undertaken any formal modeling activities due to resource constraints. We are certainly interested in any further insight which the CTPS data could provide.

57. The trucking industry is opposed to any fuel tax increase used to fund competing modes. (Pritchard/MA)

While Scenarios 2 and 3 include increased fuel taxes to be used for multimodal purposes, the Consultant's recommendations take no position on this issue. We would note that Massachusetts law (formerly and as recently enacted in referendum) permits the use of up to 15 percent of fuel tax revenue for other modes, and does not prohibit such transfers completely as asserted by the author.

58. The analysis understates the importance of the motor trucking industry. (Pritchard/MA)

On page 3-6 the report states that "trucks will continue to dominate the New England {freight} market in all three scenarios." Many steps are proposed to assist the trucking industry including ITS applications and regulatory standardization. Nevertheless, we do not believe that it is in New England's interest to become 100 percent dependent on trucks for freight movement and that there is a role for rail to play particularly in the movement of large quantities long distances to and from major ports. We are fully committed to the concept of intermodalism and believe that it can have major benefits for New England-based trucking companies by providing more opportunity for final delivery services.



59. More attention should be paid to General Aviation issues. (Murrow/CT – verbal comment at NERTAC meeting)

To the extent that General Aviation includes commuter air service, it is included in the Scenario 2 approach to regional air service planning. Private, non-commercial aircraft, while playing an important transportation role, are beyond the scope of the study.



Financing Requirements of New England Transportation Systems (Billions of Dollars)

	Scenario 1	Scenario 2	Scenario 3
Highway 1995-2000 ¹	9.4	9.1	8.7
Highways 2000-2020 ²	37.0	37.0	37.0
Rail 1995-2020 ³	5.0	10.0	40.0
Airports 1995-2020 ³	21.0	21.0	21.0
Ports 1995-2020 ³	0.5	0.6	0.7
Total	72.9	75.7	107.4

- 1 Cost of interstate-related capital expansion projects.
- 2 Available ISTEA and state matching funds adjusted for inflation.
- 3 Cost of program as outlined in NETI scenarios.



Pierside and Channel Shipping Depths - Existing and Proposed*

	Existing		Scenario 3	
Port	Existing Pierside	Existing Channel	Proposed Pierside	Proposed Channel
Eastport, ME	40' MLW	40'MLW	40-45' MLW	40'-45' MLW
Searsport, ME				
B and A Railroad Pier	34' MLW	34'MLW	35'-40' MLW	35'-40' MLW
Sprague Energy Dock	34' MLW	34'MLW	35'-40' MLW	35'-40' MLW
Portland, ME				
Merrill Container Terminal	35' MLW	45'MLW	35'-40' MLW	45' MLW
Merrill RO-RO Facility	25' MLW	45'MLW	25-30' MLW	45' MLW
Portsmouth, NH				
NHPA Terminal	35' MLW	35'MLW	35'MLW	35' MLW
Boston, MA				
Massport Conley Terminal	40' MLW	40'MLW	40-45' MLW	40'-45' MLW
Massport Moran Terminal	40' MLW	40'MLW	40-45' MLW	40'-45' MLW
New Bedford, MA				
State Pier	30' MLW	30'MLW	30'MLW	30' MLW
Fall River, MA				
State Pier	35' MLW	35'MLW	35'MLW	35' MLW
Providence, RI				
Fields Point	26'-40'MLW	30-40'MLW	26'-40' MLW	30'-40' MLW
Davisville, RI				
Quonset Point	30'-32' MLW	32'-35'MLW	35'-40' MLW	35'-40' MLW
New London, CT				
State Pier	31'-37' MLW	36'-40' MLW	31'-37' MLW	36'-40' MLW
New Haven, CT				
Finger Pier	35' MLW	35'MLW	35'MLW	35' MLW
Gateway Terminal	40' MLW	40'MLW	40'MLW	40' MLW
Bridgeport, CT	W 1M 166	ALL IMI A	AT 196 () C	ALL BASE 147.
CHCO TETHINAL	ээ иггм	ээ мгм	35. MLW	35' MLW

*Proposed in accordance with Scenario 3 of the NETI report.

Existing Channel 35'-45' MLW 45'-50' MLW 45'-55' MLW

Baltimore, MD Norfolk, VA

Other Ports
NY/NJ



Comments



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

INTER-OFFICE MEMO

TO:

Mr. Marc Cutler

DATE: 11-23-94

FROM:

Ms. Janis E. Loise

SUBJECT: PAC COMMENTS - TRANSPORTATION ALTERNATIVE SCENARIOS ANALYSIS

Attached, please find comments from members of Rhode Island's Public Advisory Committee. As noted, I have made no changes to them.

In addition, the discussion at our meeting held on November 16 generated these several comments:

- Within the Executive Summary, it was felt that Footnotes 1 and 2 of the Financing Chart need refining to be made more clear.
 - Within the Executive Summary (as noted in comments by Susan Morrison), the Division of Planning simply disagrees with the first full sentence on page ES-7.
 - A great deal of discussion revolved around whether the three scenarios were INCLUSIVE of each other or EXCLUSIVE of each other. I think the explanation may have been misleading. This needs to be clarified both for the PAC members and in the text of the document.
 - Assuming that the scenarios are GENERALLY inclusive, then that clarifies the questions that arose regarding the Scenarios by Policies charts and the Estimated Emission Benefits chart. If the scenarios are exclusive, the members feel that there is conflict between these two charts.
- The text has been corrected but Table 2.4 "Potential Improvement Projects by Major Travel Corridor" has not for US 6 in Rhode Island. We are planning an UPGRADE only with NO INCREASE in the number of lanes from the Connecticut State Line to I-295.

I will be in the office Friday, November 25 and next week, if you have any questions.



STATE OF RHODE ISLAND

Department of Administration DIVISION OF PLANNING ULFI. OF TRANSPOR!

One Capitol Hill

Providence, RI 02908-5870

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MEMORANDUM

To: Janis Loiselle

Rhode Island Department of Transportation

NO.224 P003

Subject: NETI Alternative Scenarios Analysis

Dau: November 18, 1994

As requested, we are providing comments on the draft Executive Summary, to follow up on the Public Advisory Committee meeting of November 16.

Overall, we thought that the analysis was good, and we have only a few comments.

- 1. On page ES-5, paragraph 1, last sentence, it is not so much "regional planning" that is lacking for airports, but regional (3) management (or some other word referring to authority, control, or decisionmaking). In paragraph 4, last sentence, "organized strategy" says it better.
- On page ES-7, in the section on Environmental Quality, it was not clear to us, or to others on the Advisory Committee, why Scenario 1 is preferable for air quality. It sounds as if the 6) reason is that this scenario includes the highly effective LEV program. The last full sentence on this page, however, clearly states that the program is also included in the other scenarios. Is the reason that the additional programs in the other scenarios result in only marginal further improvements? The comment also relates to the chart at the top of page ES-4.
 - 3. On pages ES-7, first paragraph, and ES-8, last paragraph, a false assumption is made that targeted infrastructure investment can be used to bring about a more desirable growth In fact, towns with low-density and undeveloped areas typically do not want infrastructure such as public water and, especially, sewers (except to serve limited areas that have industrial parks or existing wastewater management problems).
- Also; a display chart used in the presentation, titled "Financing Requirements of New England Transportation Systems," seems overambitious in attempting to summarize highway funding in two simple lines. The text in the full document mentions that the figures for the two time periods are not at all comparable. The footnotes are well-intentioned but raise more questions than they answer. At the least, in footnote 1, "interstate" should be capitalized.



Ms. Janis Loiselle Page 2 November 18, 1994

I appreciate the revisions that were made in this draft in response to my earlier comments.

Susan

Susan P. Morrison Chief, Office of Systems Planning

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P-

TEL NO:

#014 P01

New England Transportation Initiative Transportation Alternative Scenarios

STATE OF RHODE ISLAND DEFT OF TRANSPORTATION RECEIVED

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DIV OF PUBLIC WORKS DESIGN SECTION

State House Providence, Rhode Island November 16, 1994

Selected Commentary By:

Roy G. Poulsen, Ph.D. Member, NETI Advisory Committee



NOV-21-194 MON 12:36 ID:

TEL NO:

#014 P02

The current report provides good coverage of the three selected transport choices with projections into the next century. This trolks of options gives the reader a good basis for comparison and judgment.

As requested there follow several comments for consideration by the consultants.

(9)

A. An "Automobile imperative" Assumption

Implicit in the report is an "automobile imperative" assumption to a greater or lesser degree depending on the option being discussed. That is, that all parties come supplied with one or more family cars used for commuting by "Oners".

However, such is not the case. In July 1994 the writer of this critique completed a lengthy research paper that addressed corporate downsizing resulting in the concomitant creation of "redundant" workers.

On Labor Day, in his response, Robert Reich, Secretary of Labor sent me a copy of his annual appraisal of the US. Labor Force. In this work, he sees our middle class split into three subsets. These are:

- 1. An "Overclass" comprised of persons who are financially well positioned to ride out our changing economy into the next century. They also would be able to afford the cost of any of the transport options offered by the draft report.
- 2. An "Underclase" who are poorly positioned to support and maintain their families. They live in inner cities isolated from the core economy and are not (or only marginally) tied into the transport options proposed.
- 3. An "Anxious" class comprised of those who have jobs (or McJobs) "but who are anxious about their own status and fearful of their children's futures."

it appears they would only be marginally served by the options possible inasmuch as they too face an "auto imperative". (There is one more class not in the Reich list. This is the "Outer" class. Here are found America's poorest, most angry and alone. None of the NETI options would serve them).

Specifically, not addressed or inadequately addressed by NETI Scenarios 1 -3, are the mobility problems ("ease of movement of people") of Reich's categories 2 + 3. For example, "out commuting" by residents or central cities.

On the other hand, there are posed travel demand management programs (TDM) in Scenario 2 via "ridesharing, telecommuting and alternative work hours".

Also, in Scenario 2 + 3 there is broached a possible implementation of Intelligent Vehicle highways (IVHS). Such a system would preclude the entry of "junkle" oars that are all many families can afford.

It is suggested that the Reich subsets be given greater consideration in the three draft options.



11

NOV-21-194 MON 12:37 ID:

TEL NO:

#014 P03

For all but the "Overclass", transportation costs for one or more cars are an important factor in family budgets.

As a tocsin relative to this point, earlier in 1994 the Rhode Island AAA reported that the cost to own and operate a car this year amounted to \$5,918 (in after Social Security and Income tax dollars).

B. The Energy Question and Transportation

US. petroleum imports continue to rise increasing our dependency on far aware and politically uncertain source nations. For the main transport modes - automobile, truck and plane - more attention needs to be paid. With oil imports about 58% and domestic out put failing, can we continue expanding our dependence on these modes.

C. Transportation and the Undercosting of "Negative Externalities"

How long will we (and can we) underprice these harmful transport costs? Some further attention needs to be addressed to this issue.

D. Alternative Transport Modes Underemphasized

- 1. Enhanced blkeways tied to work and shopping offering zero petroleum claims and zero harmful emission.
- 2. The development of electric powered, ZEV light rail routes operating on enlarged highway median dividers.
- 3. Increased use and connectivity of mini-buses as local collectors to bring commuters and others to light rail and heavy rail boarding stops. Such modes should be equipped with bike carriers so riders can complete their trips to final destinations via bicycles.
- 4. The growth of "home-workers" who do not physically commute to an office, thus lessening the need for highway dependence.

E. Conclusions

Overall the November 1994 draft proposed seems to foresee (and propose) much of the same with same modifications that would offer a "semi utopian" transport world compared with the present one that would still be largely dependent of the automobile (and "Oners").



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11/23/94 16:29 RIDOT CONSTRUCTION → 916173541542

NO.224 P008

NOU-21- 94 MON 12:37 ID:

TEL NO:

#014 P04

US. STATISTICAL ABSTRACT, 1991 Ed.

Average Consumer Spent . \$25,892.00

For transportation \$5,093.00

% of total spent 19.7%



Subject: Comments on the NETI Transportation Alternative Scenarios

To: Janis E. Loiselle

Nov.18,1994

13)

In general, I am pleased with the content and direction of this effort. It is encouraging to see the New England region working so cooperatively. My major complaint with the report is the lack of substance and direction for the tourism elements in the transportation plan. I had expected to see an overlay and description of how a visiting tourist could transit our region taking advantage of the intermodal and internodal transportation elements and an explanation of which elements needed further additions to make the region truly assessable to both domestic and foreign tourists. With this capability properly described it would be a boon to our tourist industry and an excellent source of information to be advertized on how easy it is to visit and travel in New England.

My another concern is the lack of flexibility in describing Scenario 3. The report discounts this HSGT scenario as too expensive. I would rather the report offer some practical compromises to the scheme of a full blown total HSGT system. There must be some reasonable compromises that would suggest a partial deployment of HSGT in selected areas of the region that could prove economical and environmentally attractive.

Thank you for the opportunity to comment.

Paul E. Reynolds

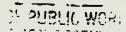


1029 Pleasant St. Unit 38 Worcester, MA 01602-1357 November 19, 1994

Ms Jan's E. Loiselle
Rhode Island Department of Transportation
2 Capitol Hill, Room 2310
Providence, RI 02903

NOV 2 1 1994

Dear Janice:



I feel that the environmental aspect of the NETT study needs a balanced perspective and, therefore, that the Plan of Cooperation should include discussions of the following environmental issues. These are personal ideas, not P&W's.

- 1. A moratorium on the enactment of new State and local environmental laws and regulations and a delay in implementing enforcement of any such laws and regulations scheduled to go into effect at some later date.
- 2. A thorough, objective review to test the validity of the premises on which existing and proposed environmental laws and regulations are based.
- 3. A thorough, objective review to determine the actual benefits of existing and proposed environmental laws and regulations.
- 4. A thorough, objective determination of the costs of existing and proposed environmental laws and regulations which then are compared with the benefit study results of "3" above.
- 5. Modification and possible revocation of existing environmental laws and regulations based upon the results of "2", "3" and "4".

I strongly urge that these issues be included because there is significant evidence being reported in public sources that, at best, scientists vigorously disagree among themselves about the existence and severity of environmental problems and, at worst, the research used to support regulations was deliberately manipulated to get the results to support the regulations. Enclosed are examples of such articles whose titles generally speak for themselves: "A Lack of Integrity Also Poisons the Air" (Insight Magazine, November 11, 1991), "Antismog Effort Costly, Misdirected, Report Says" (Boston Globe, December 15, 1991), "Not Invented Here" (Forbes Magazine, October 12, 1992), "Ban All Plants-They Pollute" (Forbes Magazine, October 25, 1993), "Is the Greenhouse Effect Just Hot Air" (Business Week, December 23, 1991), "On Global Warming, Let the Coolest Heads Prevail" (Business Week, July 20, 1992), "Global Warming Debate Grows as UN's 'Earth Summit' Nears (The Journal of Commerce, March 9, 1992), "Global Warming's Effects Downplayed" (Boston Globe, June 1, 1993) and "Five Major Myths About Garbage, and Why They're Wrong" (Smithsonian, July, 1992).





In the first article mentioned above, efforts of Congressman John Dingell, then Chairman of the House Energy and Commerce Committee, to pursue science fraud were discussed. A part of the article reads as follows "Dingell sees growing evidence that the administration has caved in to science establishment pressure to dismantle the Office of Scientific Integrity. 'This is happening', he says, 'at the same time as it's increasingly apparent that there is something wrong with much of the science underlying our environmental health regulations, as we have seen in the recent episodes on asbestos, dioxin and PCB's, where risks have been dramatically overstated at simply immense costs to the public.'".

With respect to the benefits and costs, enclosed are copies of "Environmentalism's Achilles Heel" (Journal of Commerce, December 27, 1993) and "Saving Lives at Less Cost" (Business Insurance, July 18, 1994). The Business Insurance article is particularly interesting when it discusses results of studies seeking to measure the costs of a year of life saved by various approaches. The average cost for a year of life saved by medicine-based intervention was \$19,000. The average cost for a year of life saved by injury prevention measures (which includes all workplace safety programs, transportation rules and consumer products protection) was \$48,000. The average cost for a year of life saved by pollution and toxin control was \$2,800,000!

Finally, for a closer to home example of why environmental reconsideration is necessary I point to House Bill No. 551 and Senate Bill No. 1588 now being considered by the Massachusetts legislature. These bills are an act to protect the rivers of the Commonwealth. As written, the provisions of this act generally would prohibit a railroad company from maintaining tracks which run within 150 feet of a river and would prohibit a railroad company from building tracks to serve new rail customers or to improve its operations if the tracks had to pass through that buffer zone. Highway construction and maintenance would not be subject to the same restrictions. Thus, while rail freight transportation is considered more friendly to the environment than road freight transportation, the railroads face an environmental protection law which would strangle them and ultimately force more freight onto the road system.

Very truly yours,

Harry A. Snyder



New England Transportation Initiative Draft Transportation Alternative Scenarios Analysis Comments at Public Meetings (2) Vermont November 17, 1994



chris Owen, Vermont Department of Public Service: Transportation should also be viewed through the lens of energy use. The region is too reliant on oil. Some 90 percent of oil used in the region is imported and used by the transportation sector. More diverse energy mix lowers the risk and exposure. This means supporting alternative fueled vehicles. Making fleets more efficient and is critical.

Likes the projections for leveling of gas consumption. The study should look at some of the incentive packages around encouraging the use of alt-fueled vehicles.

- General discussion: California LEV program provides important air pollution reductions. What happens to that analysis if its the automakers 49-car initiative instead? Presently, Mass, NY and VT don't believe the 49-car proposal is an acceptable alternative for those air pollution reasons?
- Congestion does matter on Vermont's smaller roads although that is not an issue in this regional study.
- Land use planning is important because sprawl development leads to increased use of vehicles.
- (19) A regional transportation and tourist initiative.

Jodee Anderson, VT State Bike and Ped Program: There is no reference to bikes and peds although they add substantially to the quality of life and can improve land use characteristics. The New England Greenway. Any intermodal facility should have bike and ped facilities and this issue should be addressed regionally. There is a tremendous tourist potential for New England in bikes and ped facilities.

In 1992, bike touring groups spent \$13 million in VT.

Tony Reddington, active in Montpelier transportation community:

- 1) Commuter rail from White River Junction to Manchester/Nashua. Return the Montrealer to its traditional route from Springfield to Brattleboro.
- 2) VMT analysis is squishy. The numbers are unreal. VMT growth will be slower than what the study projects because the last three years have been almost stagnant.
- 3) Although states may want to increase VMT for econ dev reasons, overall VMT should not increase for energy reasons. The region is too dependent on imported oil.
- 4) There should be more equity in subsidies between modes. The subsidy of air and vehicle is much greater than rail.





5) Bike/ped issues should not be ignored. They can make an impact on VMT growth and improve town centers, etc. A recent study in Oregon found a reduction of car trips by 20 percent. Reddington dubbed this an investment in the under infrastructure.



Harold Garabedian, VT State Air Pollution: There are other autorelated pollutants that should also be looked at beside ozone. These include benzene and 1-2-3 betadyne. In addition, there are particulate and CO.

The advantage of the CA LEV program is that it is a constant improvement. The technology and air requirements get tighter and tighter so that the benefits increase while the 49-car proposal provides a levelized benefit pattern.

Connection between modes is also very important as are other non-traditional modes.



New England Transportation Initiative
Draft Transportation Alternative Scenarios Analysis
Written Comments
Vermont
November 17, 1994

Alice Astarita, Transportation Chair, Vermont Chapter Sierra Club
John Pennington, President, Vermont Railway
Betsy Orselet, Director, Colchester Parks & Recreation
Greg Brown, Planner, VT Dept. of Housing & Community Affairs



TOWN OF COLCHESTER

P.O. Box 55 Colchester, Vermont 05446 802-655-0811

November 1, 1994

Mr. Richard Watts
VT Project Coordinator
General Services Center
U.S. Route 2
Middlesex, Drawer 33
Montpelier, VT 05633-7601

Dear Mr. Watts:

I have reviewed the Alternative Scenarios Analysis with interest and have no questions or comments. Therefore, I do not plan to attend the public hearing but felt that it was important to let you know that it had been read.

Sincerely,

Betsy T. Orselet, Director

Colchester Parks and Recreation

Betsy F. Orselet





Vermont Sierra Club

P.O. Box 5568 Essex Junction, VT 05453-5568

Richard Watts
VT Project Coordinator. NETI
General Services Center
US Rte 2. Middlesex. Drawer 33
Montpelier. VT 05633-7601

Dear Mr. Watts:

The Vermont Chapter of the Sierra Club has several comments regarding the Alternative Scenarios Analysis of the New England Transportation Initiative. dated October 20. 1994.

- 1. Scenario 2 takes a sound approach in regard to minimizing urban commuting miles by improved rail and bus services. To maximize the effectiveness of rail in reducing commuter miles, it should be emphasized that rail stations should be served by feeder buses, not free parking. We agree with the consultant's analysis of the New England-wide High Speed Ground Transportation (HSGT) system as an inefficient use of federal and state transportation funds. The reduction of vehicle miles traveled (VMT) using the HSGT system is not cost efficient. A greater reduction in VMT will be achieved by investing instead in commuter rail and bus services.
- 2. All the scenarios include add-a-lane projects and/or Intelligent Vehicle Highway System (IVHS) projects designed to increase highway capacity. Adding vehicle capacity on the interstate system only promotes VMT and will have a negative impact on the congestion on local roads. The consultants themselves point out that the congestion problem is getting proportionately worse on non-interstate, primarily local roadways. HOV lanes should come from converting existing highway lanes and careful consideration should be given to the effects of IVHS in stimulating additional traffic.
- Effective land use policies need to be an integral part 3. of the final long term transportation plan. incentive based actions alone will not stimulate the kind of growth centered land use patterns needed for a sustainable transportation plan. The strategy should include state-wide planning. government mandates over financing and certain land use controls. along with incentive based actions. Land use patterns should enhance the economic viability of public transit by concentrating employment near transit stops and creating dense residential areas. Land use patterns must encourage shorter trips by integrating schools. markets, restaurants, recreational and other services into residential neighborhoods. The Analysis mentions strategies such as urban growth boundaries, transfer of development rights, and large scale land banking policies which should be included in the







final transportation plan.

- 4. We support the investment in double-stack rail service and other efficiencies to allow rail to compete with trucks in providing freight transportation. However, the Analysis fails to address the reason rail has so many difficulties competing with trucks; direct and indirect past subsidies of motor vehicle use. The final transportation plan should acknowledge that these subsidies exist and should be publicly scrutinized. While many subsidies stem from federal policy, certain fees or tax policies could be enacted at a state level to correct the history of heavy subsidies to motor vehicles, including trucks.
- 5. A forth option is needed which includes the investment in commuter rail and bus service and freight rail service of Scenario 2 and the stronger land use planning strategies of Scenario 3.
- Table ES.1 of the Analysis The includes the 6. circumferential highway (I-289). The section of the new I-289 which was intended to relieve most of the congestion at Essex Junction has already been built. Construction of the remaining sections, especially the Colchester segment to Burlington, has lost support at both the state and local level. Colchester voters have rejected the sale of school property for the highway's construction not once, but twice. The Governor has promised to uphold the wishes of the Colchester voters. Meanwhile legislative support for the project's completion has lessened and the project's funding has lost priority. The Vermont Chapter of the Sierra Club opposes the completion of I-289 because it promotes increased VMT as well as sprawl and strip development.

In summary, the Sierra Club favors the most energy and land conserving, and least polluting systems and vehicles. We appreciate this opportunity for input into the process.

Sincerelv.

Alice Astarita

alin Gotes to

Transportation Chair.

Vermont Chapter. Sierra Club











SERVING VERMONT INDUSTRY WITH PRIDE



General Offices
One Railway Lane, Burlington, VT 05401
Telephone (802) 658-2550

November 3, 1994

Mr. Richard Watts
NETI
General Service Center
US Rte 2, Middlesex, Drawer 33
Montpelier, VT 05633-7601



RE: Comments on the New England Transportation Initiative

Dear Richard,

infrastructure.

On May 4, 1994 I responded to your May 1, 1994 memo, which requested comments on the New England Transportation Initiative.

To date, I have not received a response to those comments nor do I see those comments reflected in your latest document. If a comment summary of those that responded in May is available I would like to get a copy.

In regard to the most recent version of the New England Transportation Initiative, I would like to offer the following:

The report fails to recognize the regions increased dependence on rail transportation, particularly short line railroads. I have included a recent article, from "Your Company Magazine", which emphasizes he importance of rail service in the New England area. In Vermont, the traffic that is shipped in and out of the State each year by rail would if placed upon our highway system would cause it to collapse.

I do not see either double stacked containers or Rail Roader as being any solution to Vermont's transportation problems. Customarily, containers involve extremely large volumes of freight (train loads) Vermont does not have the volume necessary to support either containers Rail Roader traffic. Additionally, double stacked container service on the central Vermont Railway would require height upgrades to the existing

The report fails to address Vermont's existing rail system and its future potential. Instead, it emphasizes the importance of increasing road capacity. I would point out that we cannot financially support the existing road system, let alone an expanded one.



No consideration has been given to the Iron-highway concept, as being developed by CSX Corporation as a viable alternative to our dependence on highway trucking in a rural area such as Vermont. For instance, Vermont Rail Core presently runs parallel to the existing highway system. Why not shift some of this traffic from the overcrowded roadways to the under utilized rail system!

In conclusion, It doesn't appear that rail is being given the opportunity to be part of the transportation mix Vermont needs to develop a viable and secure economic future. I would strongly suggest you meet with the rail industry to understand the potential of their contribution better.

Sincerely,

ohn Pennington

President

cc. William Bruzzese
Arthur Hogan
Jerry Hebda, Pres. Rail Asso. of VT



TO: Marc Cutler, CSI

FM: John Robinson, EOTC/Intermodal

RE: Comments/Recommended Changes Regarding NETI Study (Ref., Exec

Summary)

Comments from the MHD's BTP&D and the MAC have been reviewed and are submitted for your review. The MAC comments are attached while the BTP&D comments are synopsized for your convenience.

BTP&D:



Regarding Pg. ES-2 "Methodology," "VMT represents the sum of all travel by auto..."

Recommendation: Delete "travel by" and insert "all vehicle miles travelled."

Reason: VMT does not indicate "all travel" since that would incorporate vehicle occupancy.



Regarding Pg ES-5, 2nd para., **Comment:** This section seems to be contrasting scenario 3 with scenario 3 and therefore does little to support comparisons of scenarios 1 or 2.



Misspell: Pg ES-7, Para., "Environmental Quality" line 5 "principle" chg to principal.

MAC

Attached!



To:

Steve Muench@Administration@Aeronautics

Cc:

Bcc:

From: Subject: MS@MAC.TANDON@SERVERS Undeliverable Message

Monday, November 7, 1994 10:00:39 EST

Attach: Certify:

PRESS F9 TO RECOVER ORIGINAL MESSAGE

----- [Message Follows] ------

To:

JOHNROBINSON@USERS@EOTC

Subject:

NETI ALTERNATIVE SCENARIO ANALYSIS

Message not delivered to recipients below. Press F1 for help with VNM error codes.

VNM3042:

JOHNROBINSON@USERS@EOTC

F10-Done ESC-Quit F2-Names F3-Import F4-View Attach F5-Find File F6-Addrbk

John E Mail work work that work the same why I the .



JOHNROBINSON@USERS@EOTC

Cc: Bcc:

From:

Subject: Date:

Steve Muench@Administration@Aeronautics NETI ALTERNATIVE SCENARIO ANALYSIS

Friday, November 4, 1994 15:02:28 EST

Attach: Certify:

Forwarded by:

Thank you for your memorandum dated October 25, 1994, above subject. The following are MAC's comments:

In the last paragraph in the Scenarios section on page 2, I took that paragraph to mean that close to \$30 billion could be diverted from airport expansion projects in New England to rail projects. If that is the intent of that paragraph, there is a gross misunderstanding of the airport funding situation. Assuming level AIP authorizations over the next 25 years, there will only be approximately \$36.25 billion of airport improvement funding available from the FAA for the entire United States. Most AIP funding today goes toward projects to maintain existing capacity and safety levels or to meet environmental regulations. In Logan's five year (1994 - 1999) AIP Capital Improvement Plan, \$45.3 million of the total \$92 million was planned for residential sound proofing purposes! Much needed airport improvement projects are being postponed or cancelled because Congress and the Administration are not authorizing spending levels commensurate with needs and funds available in the Airways Trust Fund. It would be a terrible mistake to fund highway and rail projects through further cutbacks in the AIP program.

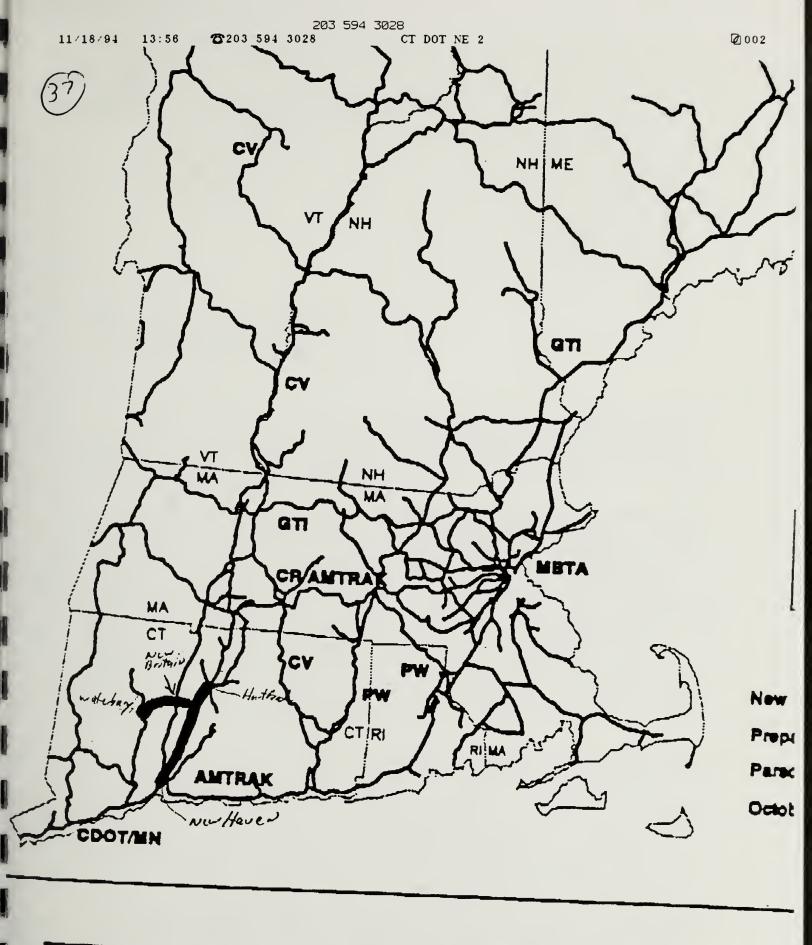
- There is insufficient statistical, factual information to support or refute the claim that the 8 regional airports are only serving 60% of their service catchment areas because there is a lack of a regional planning approach. The current Regional Air Service Study will address this issue in the near future. Supposedly, Burlington is serving more than 100% of its catchment area and it is doing so without a "regional planning approach"! Based on our experience so far in the New England Council project, the best you can say at this point is that there may be potential improvements to air service through enhanced regional planning and the appropriate agencies are cooperating to identify and assess those potential improvements. Incidentally, there are a number of state aviation agencies who believe there is a degree of regional planning going on already via the AIP Capital Improvement Plan process.
- 3. Similar to Item 2. above, we believe the <u>last sentence</u> in the third paragraph on page 5 fails to grasp the airport planning process. With few notable exceptions, Airport Improvement Program and State monies are going toward projects driven by need. It has been years and will be many more years before funds are spent on truly optional airport projects. make such a categorical statement without examining, or at least mentioning, the costs associated with not maintaining existing airport facilities up to standards would be misleading and incomplete.
- MAC has insufficient information to assess the proposal to create a New England Regional Intermodal Freight Corportation.
- The last paragraph on page 6 makes the following statement: "By developing



a regional demand allocation strategy among Logan Airport and a second tier of egional airports, a critical mass of services could be created at the second ier airports though negotiations with air carriers." I recommend that this statement and the two sentences following it be deleted in their entirety. Tirst, the current Regional Air Service Study does not develop a regional emand allocation strategy. Rather, it assesses the existing situation and identifies potential areas which may benefit from regional cooperation. If there are sufficient areas of mutual interest, then a second study will be nitiated. The comments in the NETI document are, at the very least, premature. Further, no one should presume at this point what the air carriers' position(s) will be at the conclusion of either study.

Ojc midity









November 18, 1994

Marc Cutler, Vice President Cambridge Systematics, Inc. 150 Cambridge Park Drive Cambridge, Massachusetts 02140

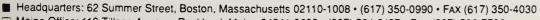
Dear Mr. Cutler:

Thank you for an interesting and informative discussion at the NETI Massachusetts Advisory Committee meeting last Monday. The Conservation Law Foundation ("CLF") would like to reiterate some of its concerns, and emphasize its strong support for two of the consultants' recommendations.

First, as we discussed, vehicle miles travelled ("VMT") are an inappropriate indicator of relative mobility in urban areas, and even in rural areas with little congestion, increases in VMT may be associated with negative impacts such as destruction of valuable land and increased run-off. The focus in measuring mobility should be on the number of person trips, and the goal of the scenarios should be on identifying the means for making such trips at the lowest economic, environmental and social cost. In some cases, trips may be eliminated altogether without an accompanying loss of mobility (or economic activity); for example, if people begin to do their shopping by telephone or if they telecommute. In sum, VMT as an indicator of mobility must be treated with extreme caution, and the text should be revised to reflect its very limited utility.

Second, CLF questions the study's categorical conclusion that "the solution to transportation's share of the ozone problem lies in vehicle technology and not in reducing the growth in vehicle miles travelled." (ES-8). The federal Clean Air Act requires states both to attain and maintain federal air quality standards. Recent events give reason to question whether the Ozone Transport Commission's ("OTC") Low Emissions Vehicle ("LEV") proposal, upon which this conclusion is based, will be implemented. The graphs used in your presentation show that under the federal Tier 1 proposal emissions of volatile organic compounds ("VOCs") begin to increase again in 2010 and emissions of nitrogen oxides ("NOx") begin to increase again as soon as 2005. It appears that only the OTC's LEV proposal would insure





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 ☐ Vermont Office: 21 East State Street, Montpelier, Vermont 05602-2152 • (802) 223-5992 • FAX (802) 223-0060



Conservation Law Foundation

Marc Cutler, Vice President November 18, 1994 Page 2

continuous reductions in emissions between 1999 and 2020. The Environmental Protection Agency's Employee Commute Options Guidance (1992) notes that:

[I]t is widely accepted that shortly after the year 2000, the increased emissions caused by more vehicles being driven more miles under more congested conditions will outweigh the fact that each new vehicle pollutes less, resulting in an increase in emissions from mobile sources.

<u>Id.</u> at 1. This document was published before the OTC's LEV proposal, but its predictions may nonetheless hold true if the proposal is not adopted.

Further, all of the projections in the graphs begin in 1999, the year in which serious non-attainment areas must have achieved federal air quality standards, and thus have initially "solved" the ozone problem. The graphs are meaningless for drawing conclusions about the measures needed to achieve attainment.

Even if the transportation sector's share of the ozone problem were solved by improvements in vehicle technology alone, the study's statement, by isolating the ozone problem, neglects the additional problems that could be solved by reducing growth in VMT: sprawl, run-off, congestion, loss of valuable land. The benefits of reducing VMT to New England's environment and economy extend beyond air quality, and they should be recognized in any discussion of solutions to the ozone problem. CLF urges that the study's statement be modified to reflect that improvements in vehicle technology may lead to significant reductions in the emissions of ozone precursors, but that limiting the growth of VMT in many areas would improve air quality as well as address a whole host of other problems.

Third, CLF strongly supports the consultants' recommendation that the New England states pursue scenario 2 for expanding passenger rail. In particular, the states should make a firm commitment to investigating, where necessary, and then rapidly implementing, where feasible, the following passenger rail projects included in scenario 2: restoration of commuter/regional rail service between Concord/Nashua and Boston, extension of regional rail service north of Portland; inauguration of a recreational/tourist rail system in Vermont;



Conservation Law Foundation

Marc Cutler, Vice President November 18, 1994 Page 3

extension of regional rail service north of Portland; and opening of the Concord to White River Junction rail line for Boston to Montreal service. (p. 4-3). We also actively support the construction of the Central Artery Rail Link and enhancement of the Inland route Amtrak service which are also included in the scenario. A comprehensive regional rail system in New England would have tremendous economic and environmental benefits, and should be actively pursued.

Fourth, CLF supports the consultants' recommendation to pursue congestion pricing. We consider congestion pricing mainly as a tool for more efficiently allocating resources, and discouraging unnecessary driving. Congestion pricing recognizes that the "unaccounted costs of driving - pollution, congestion, accidents - vary with driving conditions, and impacts are highest during congested periods on specific roadways." Many industries, including airlines, telephone companies, electric utilities, restaurants and resort hotels use it as a means for managing the varying demand for a product and for avoiding expensive investment in infrastructure to handle peak demand. For road travel, congestion pricing would impose differential fees on automobile and truck transportation during peak periods. People who have a choice of travel times would have an incentive to travel at a different time; others who do not have a choice would be encouraged to reduce their travel costs by car pooling or taking public transit.

One of congestion pricing's greatest advantages is that it is a flexible strategy which can be fine-tuned and adjusted to changing conditions. It involves less risk than other transportation strategies. Moreover, current technologically advanced fee collection systems would make implementing a congestion pricing scheme relatively simple, more efficient and less costly to administer than existing toll collection systems.

²Johnson, <u>Avoiding the Collision of Cities and Cars: Urban</u>
<u>Transportation Policy for the Twenty-first Century</u> (Report of the National Academy of Sciences) (1993), p. 17.



¹Kessler and Schroeer (U.S. EPA Office of Policy Analysis), <u>Meeting Mobility and Air Quality Goals:</u> Strategies that Work, 1, 23 (1993).



Conservation Law Foundation

Marc Cutler, Vice President November 18, 1994 Page 4

The impact of congestion pricing along selected arterials³ in New England should be evaluated, and if found beneficial should be implemented as soon as practicable. The evaluation should consider the impact of roadway fees on air pollution, congestion and energy use based on the changes in travel volumes and times, mode choice, and travel routes due to such fees. For example, a fee of ten cents/mile during peak hours on all major routes in the San Francisco Bay area was estimated to reduce total trips by 2.2 percent and, hence reduce ozone precursors by three to five percent. Of the New England states, Massachusetts is already planning to install electronic toll collection booths on the Massachusetts Turnpike and at the Sumner Tunnel. If found beneficial, congestion pricing on these roadways would be particularly easy to implement because it would involve only a change in the fee structure of the collection scheme.

Thank you for your consideration of these comments.

Sincerely,

Veronika Thiebach Staff Attorney

³At a minimum, these should include I-95, I-93, and I-84.

⁴National Study: Congestion Pricing is Promising in: The Urban Transportation Monitor (June 14, 1994), p. 4. This article describes the findings of a recent study by the National Research Council of the National Academy of Sciences on congestion pricing.



To: Marc Cutler From: Save The Bay Date: Nov. 28, 1994

NETI: Alternative Scenarios Analysis

Thank you once again for the opportunity to comment on the draft Alternative Scenarios Analysis. Save The Bay representing all the environmental groups in the state have grave concerns about some of the assumptions made in this document.

- 1. That, according to the author. "VMT growth is not in and of itself a bad thing." We wholeheartedly and emphatically disagree and suggest that if you read further on in this document that the author disagrees, as well. To say that alternate fuels will buy us another 10 years before we have to clean up the air, is missing the point completely. Even if we get to the prescribed EPA levels we have to hold them there and continue to grow. EPA is assuming some human risk and that which is our health. Annually Rhode Island spends 365 million dollars a year on health care costs associated with motor vehicle emissions. (RI Lung Association). Air emissions are not the only serious detrimental effect of VMT growth: water pollution, drinking and recreational, habitat destruction, center cities destruction, over reliance on foreign oil, squandering of resources ie, farm, forest, wetlands, disposable income, and time.
- 2. Section 10.3, "Effect of sensitive environmental areas makes reference to mitigation banking and the establishment of replacement wetlands in advance of project's impacts." At the Vermont meeting I distinctly remember (please check meeting notes) telling the group that environmentalists do not agree to this approach. We have not changed our minds. This means we were not heard and that we have no scenario 2 or 3 for sensitive environmental areas. This is unacceptable.
- (42) 3. Please explain how your study defines congestion.
- 4. There seems to be to large a synapse between scenario 2 and 3. This leads one to the conclusion that scenario 3 is off the charts and unworkable. This is especially evident in the rail scenarios.
- 5. When you talk about costs did you take into account health care costs? Did you factor in environmental benefits or were the costs you represent building costs only?

Singerely

Mason Watsh



66 Whitney Road Harvard, MA 01451 (508) 456-3631

November 28, 1994

Dennis Coffey, Mass. EOTC, NETI Policy Committee Transportation Building, Room 3170 10 Park Plaza Boston, MA 02116

Sonya Hamel, Mass. EOEA, NETI Policy Committee 100 Cambridge Street, 20th Floor Boston, MA 02202

Dear Sirs,

The Massachusetts Advisory Committee (MAC) to the New England Transportation Initiative (NETI) submits the attached comments on the Draft Transportation Alternative Scenarios Analysis.

Very truly yours,

Malcolm Davis
Gregory Elevich
Phil Shutt

for MAC

cc: Marc Cutler
Cambridge Systematics
150 CambridgePark Drive
Suite 4000
Cambridge, MA 02140

Charles Repeta, NETI Project Manager Transportation Building, Room 3170 10 Park Plaza Boston, MA 02116



Comments on the Draft Transportation Alternative Scenarios Analysis

The Massachusetts Advisory Committee (MAC) is generally supportive of the consultant's conclusions, subject to the comments below.

VMT, Mobility, and Congestion.

The focus on VMT in the Methodology section (p ES-3) as indicator of mobility, even though somewhat qualified later, is not convincing and revision is suggested. The paragraph on this in the attached CLF comment letter points out limitations of the present discussion.

There is also concern about the level of VMT and urban and corridor congestion increase projected, and that additional cooperative efforts beyond those recommended in the Executive Summary may be needed. One thought might lie in the area of greater coordination of rail, bus and rental car services (intermodalism revisited) on a region-wide basis to provide viable convenient alternatives to more SOV trips.

HSGT.

We do support the general conclusion that commitment to implementing HSGT would not be appropriate at this time. However, the discussion on HSGT (p ES-5) lacks credibility as it stands, and revision is suggested. It is suggested that the difficulty comes from strict adherence to the HSGT system model described (p 4-5, Figure 4.4, p 8-6, Table 8.7). The system described is about 1000 route miles, government funded, costing about \$30 billion, a "New England on its own" system (p ES-5). But as the report points out (p 4-5), "Because new HSGT systems are costly, they are appropriate only for high density travel corridors and system ridership is [critical for viability]". Selecting routes for density/ridership/efficiency suggests that a more reasonable system mileage would be 300 to 700 miles, depending on selectivity. Moreover, HSGT would be likely only as part of a larger system, with a major portion of funding from the private sector. And finally, what may be the potentially most attractive form of the technology is not ready for implementation.

It is suggested that HSGT is a technology which could have merit for the future for a system in which the high density (southern) part of New England would be a key part in a considerably larger whole, and would merit study. It is also urged that, in arriving at a plan of cooperation among the New England states, it will be important to have a strong component dealing with such studies in general and how the plan will be open to continuing updating and reassessment as new technologies and areas of cooperation become appropriate as time passes.

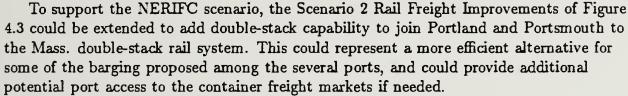






Freight.

The consultant's recommendations include the New England Intermodal Freight Corporation (NERIFC) to develop a New England megaport concept, largely focused on five select ports supported by double-stack rail facilities and intermodal centers, particularly seeking substantial market share increase for New England in the growing container shipping market. However, the mission of NERIFC is not as clear everywhere in the report as just stated or as described in the Executive Summary. The report includes proposals for NERIFC to also include aviation (p 5-7) and HSGT (p 11-16) in its charter. No discussion was found as to why such a far-reaching conglomerate mission would be justified and appropriate. In fact, for HSGT, which as a new mode would likely need its own specialized sponsor working innovatively at the Federal and whole corridor level, it appears quite unlikely to be appropriate.



It is suggested that addition of a supplementary table and notes could help those readers seeking data to reassure themselves or to understand that the Scenario 2 and 3 measures considered for freight are indeed plausibly adequate to hold or to improve our market share. Such material might include, for example, for the five principal ports being discussed, berth depths and extent as they exist, their reasonable potential for upgrading, and what are the requirements for existing and likely future ships. Also container and double-stack dimensions and clearance requirements and how they are changing or standardizing with time (cf p 4-5).

In section 4.5, Intermodal Impacts (p 4.-10), the concern expressed over possible negative effects of competition of intermodal facilities does not bring out the positive effects of double-stack rail competition on freight rates to New England. A single railroad effectively dominant in providing freight access into New England could set monopolistically biased rates, perhaps effectively biased in favor of other, larger ports served by such a railroad (cf p 4-13).

Rail.

The \$ 4 billion cost attributed to the North - South Station rail connector is described (p 4-5) as nearly 50 percent of the total capital [rail] costs associated with [scenario 2]. \$ 4 billion is 40 percent of the \$ 10 billion total shown in Table 8.7. To clarify note 1 on page 4-5, the remainder (above the \$ 1.8 billion cost of the rail connector made up of the tunnel and facilities and the Amtrak electrification extension to Lowell) is for other eventual desired improvements to the commuter rail system over many years, which are generally enabled by the \$ 1.8 billion cost of the rail connector.













Air.

(2)

The low enplanement levels forecast for Worcester airport in Tables 5.2 through 5.4 represent routine growth rates from today's abysmally low base. Recently there has been substantial concern in the Worcester community over the low level of service and perceived unreliability of service due to the airport's vulnerability to adverse weather conditions. The airport's lack of ready access from the interstate system also currently limits the airport's draw as a regional airport for central Massachusetts. These issues are being studied. Thus it may be noted that if these issues are successfully resolved, Worcester's potential role as a normal regional airport could lead to enplanements several times those projected.

MAPC Comments.

Comments on Tilt-Rotor technology, TDM, and the land use/transportation connection are contained in the MAPC comments letter attached.

CLF Comments.

Further comments from CLF are contained in their letter attached.

PRS





Metropolitan Area Planning Council

60 Temple Place, Boston, Massachusetts 02111 617/451-2770 Fax 617/482-7185

Serving 101 cities and towns in metropolitan Boston

November 22, 1994

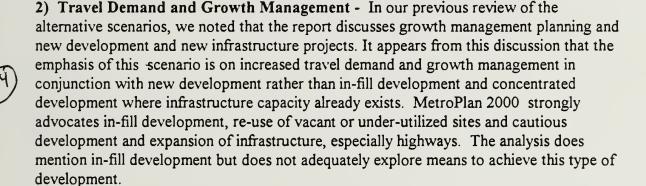
Mr. Phil Shutt, Chairman Massachusetts Committee - NETI Study 66 Whitney Road Harvard, MA 01451

Dear Mr. Shutt:

The Metropolitan Area Planning Council has reviewed the draft Transportation Alternative Scenarios Analysis dated October 1994. Our review has been based on the goals and objectives of MetroPlan 2000, MAPC's regional development plan. We would like to offer the following comments.



1) Tilt-rotor technology - MAPC has been involved in studying the feasibility of tilt-rotor technology in fulfilling some of the region's air transportation needs. There is no mention of this technology in the Transportation Alternatives Scenarios analysis and we have not seen any discussion of this technology during the course of the NETI study. There should be some consideration of the use of this technology in the Major Change Scenario. At the very least, the final report should include a discussion of why this technology has not be analyzed.





3) Land use/transportation connection - Both the moderate and major change scenarios recognize the importance of the connection between sound land use planning and transportation policy. This is also one of the cornerstones of MetroPlan 2000. MetroPlan 2000 also takes into consideration the housing:jobs ratio. However, physical proximity of land uses is only one factor involved in reducing automobile trips for commuting. In our review of the transportation alternative scenarios, we recommended that the analysis should take into consideration social factors that influence travel patterns



such as two-career couples with varying travel patterns due to jobs in different locations, child-care arrangements and other locational factors such as preference for certain school districts. The analysis does recognize some of the impact of two-career couples but still does not address other forces. A key factor in the ability of land use planning to reduce commute trips is the presence or absence of affordable housing. In-fill development must be made affordable or people will continue to move to the fringes of the metropolitan area where housing costs have traditionally been lower.

The majority of the discussion on TDM measures centers around the types of employment that might be most suitable for this approach. While this is one factor, there are other societal forces at work that must be considered in order to gain a realistic evaluation of the potential for TDM. On Page 7-4 there is a discussion of carpooling which states that carpool passengers do not necessarily eliminate their entire commute trip since members often drive to a meeting point to start the carpool trip. The discussion of TDM also needs to take into consideration that carpool members may make additional trips to take children to school or daycare before carpooling. There needs to be a fuller discussion of other employment factors with the potential to increase the amount of carpooling such as onsite day care.

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4) Modeling MetroPlan 2000 Concepts - Many of the concepts in the major change scenario are consistent with MetroPlan 2000. MAPC has worked with the Central Transportation Planning Staff (CTPS) to incorporate MetroPlan 2000 into regional transportation models. We offered to work with the consultant team to share our experience with modeling MetroPlan 2000. We would like to extend this offer again as the final analysis is being prepared.

Thank you for the opportunity to review and comment on the analysis of the three Transportation Alternative Scenarios. We look forward to continuing our participation in this study.

Sincerely

David C. Soule Executive Director

cc: Ralph Nicosia-Rusin, FAA

Karen Pearson, MHD

Charles Repeta, NETI Project Manager

Grace Shepard, Chair, MetroPlan Committee

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December 1, 1994

Marc Cutler NETI Project Manager Cambridge Systematics

Via FAX--617/354-1542--Four Pages Total

Dear Mr. Cutler:

I fear that many of the recommendations of the draft Transportation Alternative Scenarios Analysis will meet significant opposition from the trucking industry because of the misguided and confusing discussion of infrastructure financing. For example, the concepts of a coordinated regional intermodal freight planning activity or even the "New England Region Intermodal Freight Corporation" hold great promise, but the only proposed financing mechanism is unrealistic and totally unacceptable -- increased motor fuel taxes to pay for non-highway investments. Accordingly, the only rational reaction is to oppose anything related to Scenarios 2 and 3.

As Kevin Kiley of the Massachusetts Motor Transportation Association made quite clear at the NERTAC meeting on November 10, 1994, increased fuel taxes to fund projects, other than for roads and bridges, will be met by protracted opposition across New England. As you recall, Mr. Kiley has been in contact with his counterparts in each of the New England states and relayed their consensus.

The electorate of Massachusetts has recently relayed the same message with the passage of Question 8--the public has called for better roads and bridges through the spending of taxes for their intended use. Clearly, the use of highway money for non-highway uses is no longer allowable. Also, as you are quite aware, several states have constitutionally protected highway trust funds (i.e. Maine, Massachusetts, New Hampshire) which restrict the spending of highway These facts are in direct opposition to the reports conclusion -- "Fuel tax revenue will be a valuable source for funding highway and non-highway projects in future years."

It is amazing to me that with all the discussion of public expenditure on infrastructure that will benefit private organizations (for example, shipping companies and railroads) that there is no discussion of user fees for these services -- there should be!





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It appears that the <u>Transportation Alternative Scenarios</u>
<u>Analysis</u> has missed the obvious—the current efficient motor freight industry has allowed for the regional economic growth in the past and is poised for participation in the growing intermodal future that market forces are currently forging. The report does not effectively explain how or why the current role of trucks is inadequate. Further, the report does not effectively incorporate the role of "intermodalism" in New England currently taking place.

Figure ES2 suggests that for Scenario 1, there will be "increasing dominance of freight markets" by trucking. How do you figure? In the main report (section 3.2.4) there is a discussion of how there is an "accelerating integration of truck and rail service to provide intermodal freight service" but concludes that under Scenario 1 intermodalism will not be significant in scope nor coordinated. Once again, how do you figure?

The Transportation Alternative Scenarios Analysis makes an unjustified leap to a discussion of the use of disincentives (i.e. increases in fuel taxes) to motivate diversion of freight from truck to rail—this is not a good public policy recommendation. It would appear more rational for the proposed improvements in ports, railroads and airports be funded by the users of the systems. As with highways, the introduction of user fees should be pursued as opposed to the destructive program of disincentives to highway use.

The earlier NETI <u>Inventory</u> report did an effective job demonstrating the important role that motor freight played in the New England economy. The resultant description in the <u>Journal of Commerce--"New England Study Urges Regional Plan to Boost Trucking"</u> was a real step in the right direction and there was hope for a plan to promote trucking as a business. Unfortunately, the <u>Transportation Alternative Scenario Analysis</u> did the opposite and called for measures that would decimate trucking and create a negative business environment in New England.

Further, the proposal is clearly not consistent with the spirit of ISTEA-91. As you know, ISTEA calls for connectivity and improved intermodal links. In that spirit, a coordinated agenda to smooth the linkages is supported wholeheartedly by the industry. I have recently come across an excellent statement from the draft Connecticut Intermodal Management System--

An intermodal concept of transportation must not require users to make sacrifices in travel time and out-of-pocket cost. Rather, the (intermodal system) should offer transport users more efficient, expeditious and lower cost transportation alternatives



--NETI needs to take this message to heart.

In general, I feel that the "alternative scenario analysis" motivates the reader to draw flawed conclusions -- Scenario 1 is presented as completely unacceptable and that Scenario 3 is couched as most desirable. This is foolish -- there are many good attributes to our existing transportation system-i.e. the cost-effective, door-to-door service of trucking. The notion of Scenarios 2 and 3 where transportation costs are increased, through increased taxes on trucking, in order to fund other and competing private interests (i.e. freight rail) are not desirable to me as a consumer or one who runs a business.

Please consider the following excerpt from the Alternative Scenarios--

... (the) doubling of the cost of motor fuel would have substantial adverse effect on the trucking and distribution sectors of the economy. Overall implementation of this scenario (Scenario 3) will result in some short- and intermediate-term slowdown in the growth in the region's economy...

--I personally would like to see the author explain how this proposed "slowdown" is good. And explain it to the region's truck drivers, shippers and receivers, consumers, mechanics, owner-operators, business leaders and of course, the New England Governors. While the quote above refers to a fuel tax increase of \$.50 to \$1.00, the logic holds for smaller increases in fuel tax -- it increases transportation costs for New England businesses and consumers.

Lastly, the report incorrectly cites the fuel tax rates for New England in 1992. The October, 1992 rates (including per gallon surcharges and clean-up fees) are as follows:

	<u>Gasoline</u>	Diesel
Connecticut	\$.26	\$.18
Maine	\$.19	\$.20
Massachusetts	\$.21	\$.21
New Hampshire	\$.18	\$.18
Rhode Island	\$.26	\$.26
Vermont	\$.16	\$.26

As you know, we actively follow and analyze these rates and I have no idea where the Transportation Alternative Scenarios Analysis numbers came from -- I looked at state department of revenue information and in the 1992 Highway Statistics. Accordingly, I consider all other statistics suspect and I have no confidence in the Report's projections of revenue or employment.

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One lesson can be learned from fuel tax trends. In 1991, the State of Connecticut reduced their diesel tax rate from \$.25 to \$.18. This was done to help the recession beleaguered trucking industry and truck stops and to make Connecticut a more competitive business location. Since the reduction, the State of Connecticut has experienced an increase in the level of diesel fuel tax revenue.

As NETI considers economic vitality, it is obvious that efficient freight flows must be motivated and rationalized. Cutting taxes on commercial motor vehicles must be considered. This would help motivate economic activity. Increasing taxes on the primary mode of freight flows-trucking--in order to help subsidize other modes that the marketplace has not considered viable and violates all economic principals. The objective of NETI is to help motivate intermodalism through rational planning and to follow the spirit of ISTEA, and not to hobble or destroy the region's business interests.

As always, the ATA Foundation is available to help your team in its efforts and to expand on any of our research activities.

Best regards,



cc: Via FAX .

Mike Riley/Gary LaBrake

Motor Transportation Association of Connecticut

Dale Hannington

Maine Motor Transportation Association

Kevin Kiley

Massachusetts Motor Transportation Association

Bob Sculley

New Hampshire Motor Transportation Association

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Rhode Island Trucking Association

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